

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER 2013

Subject Code: 171403

Date: 07-12-2013

Subject Name: Entrepreneurship and Food Plant Management

Time: 10.30 am - 01.00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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|--------|--|---|
| 1 a | What are the different growth stages of food processing industry? With suitable example discuss business opportunity at the end of cycle. | 7 |
| 1 b | “India can become world food factory”. Justify? | 7 |
| 2 a | Calculate the minimum number of days a food processing industry should work to get minimum desired profit.
Capacity of the plant : 1 ton finished product per hour;
Company works only one shift with 7 effective hours of production.
Sale price: Rs 90,000/- per ton;
Fixed cost: Rs 1,27,000/- per year,
Water charges: Rs 220/- per working day;
Energy charges: Rs 35,600/- per working day;
Salary of permanent staff: Rs 1,25,000/- per month
Salary of contractual Rs 1500/- per working day
Maintenance expenditure: Rs 75,000/- per year
Raw material cost: Rs, 5,87,272/- per working day | 7 |
| 2 b i | What are the qualities expected from an entrepreneur? | 3 |
| 2 b ii | What is the full form of SEEUY? Which Government agency promote it and how? | 4 |
| OR | | |
| 2 b i | What are the objectives and functions of personnel management in the organization? | 3 |
| 2 b ii | Discuss different pricing policies a successful entrepreneur takes in his entrepreneurship? | 4 |
| 3 a i | What are the steps to be followed in implementing ISO 9000 in the organization? | 3 |
| 3 a ii | Justify how a “well maintained plant” can produce process foods at cheaper rate. | 4 |
| OR | | |
| 3 b i | What are the limitations and advantages of large batch size? | 3 |
| 3 b ii | Discuss role and activities of National Bank of Agriculture and Rural Development in promoting food processing sector. | 4 |
| 4 a | Explain JIT? Discuss its effect on the food plant performance? | 7 |
| 4 b | Calculate the cost of utilities per ton (finished product) in a fruit juice concentrating plant operating 25 days a month, 10 hours a day, water requirement is 6 times the raw material used. If the machines have the capacity to handle 2 ton raw material to produce 0.4 ton concentrate per hour. The total connected electric load is 25 kW. The rates of electricity and water are Rs 7/kWh and Rs 100 /KL. | 7 |

OR

- 4 a Discuss the importance of material management in a food processing industry? 7
- 4 b Calculate the fixed cost of operation of electric dryer per annum. The initial cost of the dryer is Rs 5,00,000/- and salvage value is Rs 25,000/- the life of the dryer is 10 years. The rate of interest is 12% per annum. Consider straight line method of depreciation and building on rent Rs 1000 pm. The company pays insurance charge at the rate of 0.1% on the initial cost per annum. 7
- 5 Calculate the market retail prices per unit packaging of instant soup mix in 50g, and 100g tetra pack if the fixed cost of production of soup mix at the factory is Rs 20,000/- per ton and variable cost including cost of raw material but excluding packaging is Rs 1,00,000/- per ton. The cost of tetra pack for 50, and 100g is Rs 4/-, 6/- respectively. The cost of CFB box carrying 10 kg capacity is Rs 35/- each. It is expected that the transportation cost per packet of 10 Kg is Rs 200/-. The industry and wholesaler wants to have profit of 25% and 20% respectively on their cost. Retailer wants 35% profit. Company has policy to offer minimum of 10% discount on MRP to the customer. Calculate the MRP of 50, and 100g packet. 1x
14=
14

OR

- 5 An industry wants to give its extruder for custom hiring in its **third year** at the rate of Rs. 325/- per hour. Find the profit or loss percentage if following information is available to you. Do not make any assumption for your calculations. Initial cost of extruder Rs. 2,50,000/-. The capacity of extruder 200 kg/h. Its electric rating 30 kW and the unit charge of Rs 7 per kWh. 3+
2+
2+
2+
3+
2=
14
- Fixed rate of interest 18% /year Insurance 0.1% on Rs.20,00,000/-
Operator Rs.1,20,000/- per year, Industry operates 240 days/year and 8h/day
Building rent Rs. 2000/- pm; miscellaneous expenditure Rs. 6,000/-per year
Depreciation and maintenance cost varied annually on the basis of the cost at the beginning of the year as follows:

Year	Depreciation, (%)	Maintenance, (%)
First	8	0.2
Second	15	0.5
Third	22	1.7
